

Ser. No. 09/556,466
Docket No. 23623-7048
Client Ref. GC 571-2

Appendix A
Clean Version of Amended Claims

a₁ Sub B5
6. (Amended) The antagonist of claim 147, wherein said hydrolase is a hydrolase selected from the group consisting of a protease, an esterase, an amidase, a lactamase, a cellulase, a lipase, a phospholipase, a phosphatase, a sulfatase, a lysozyme, a glycosidase, a nuclease, an aldolase, a ketolase, a lyase, a hyaluronidase, an amylase, a cerebroside and a chitinase.

7. (Amended) The antagonist of claim 6, wherein said hydrolase is a protease.

8. (Amended) The antagonist of claim 149, wherein said serine hydrolase is a subtilisin-type serine hydrolase and said cysteine is substituted for an amino acid in or near a subsite selected from the group consisting of an S1 subsite, an S1' subsite, and an S2 subsite.

a₂ Sub B6
11. (Amended) The antagonist of claim 148, wherein said serine hydrolase is a chymotrypsin-type serine protease and said cysteine is substituted for the amino acid corresponding to a reference residue in a mature trypsin (Protein Data Bank entry 1TPP), wherein said reference residue is at or near a residue selected from the group consisting of Tyr94, Leu99, Gln175, Asp189, Ser190, Gln192, Phe41, Lys60, Tyr151, Ser214, and Lys224.

12. (Amended) The antagonist of claim 148, wherein said serine hydrolase is an alpha/beta type serine hydrolase and said cysteine is substituted for the amino acid corresponding to a reference residue in a *Candida antartica* lipase (Protein Data Bank entry 1TCA), where the reference residue is at or near a residue selected from the group consisting of Trp104, Leu140, Leu144, Val154, Glu188, Ala 225, Leu278 and Ile285.

a₃
15. (Amended) The antagonist of claim 7, wherein said enzyme is a cysteine protease.

a₄
17. (Amended) The antagonist of claim 7, wherein said enzyme is a metalloprotease.

Q5 Sub B11
41. (Amended) The method of claim 154, wherein said hydrolase is a hydrolase selected from the group consisting of a protease, an esterase, an amidase, a lactamase, a cellulase, a lipase, a phospholipase, a phosphatase, a sulfatase, a lysozyme, a glycosidase, a nuclease, an aldolase, a ketolase, a lyase, a hyaluronidase, an amylase, a cerebrosidase and a chitinase.

42. (Amended) The method of claim 41, wherein said hydrolase is a protease.

43. (Amended) The method of claim 155, wherein said serine hydrolase is a subtilisin.

44. (Amended) The method of claim 40, wherein said cysteine is a cysteine that is substituted for an amino acid forming a substrate binding site.

45. (Amended) The method of claim 43, wherein said serine hydrolase is a subtilisin-type serine hydrolase and said cysteine is substituted for an amino acid in or near a subsite selected from the group consisting of an S1 subsite, an S1' subsite, and an S2 subsite.

46. (Amended) The method of claim 43, wherein said subtilisin is a *Bacillus lentus* subtilisin.

Q6
48. (Amended) The method of claim 155, wherein said serine hydrolase is a chymotrypsin-type serine protease and said cysteine is substituted for an amino acid corresponding to a reference residue in a mature trypsin (Protein Data Bank entry 1TPP), wherein said reference residue is at or near a residue selected from the group consisting of Tyr94, Leu99, Gln175, Asp189, Ser190, Gln192, Phe41, Lys60, Tyr151, Ser214, and Lys224.

49. (Amended) The method of claim 155, wherein said serine hydrolase is an alpha/beta type serine hydrolase and said cysteine is substituted for an amino acid corresponding to a reference residue in a *Candida antartica* lipase (Protein Data Bank entry 1TCA), where the reference residue is at or near a residue selected from the group consisting of Trp104, Leu140, Leu144, Val154, Glu188, Ala 225, Leu278 and Ile285.

a6 50. (Amended)

The method of claim 42, wherein said enzyme is an aspartyl protease.

a7 52. (Amended)

The method of claim 42, wherein said enzyme is an cysteine protease.

a8 54. (Amended)

The method of claim 42, wherein said enzyme is a metalloprotease.

a9 65. (Amended)

The method of claim 37, wherein said enzyme is a protease and said targeting moiety is a receptor.

a10 92. (Amended)

The enzyme of claim 75, wherein said target is a molecule present on the surface of a cell.

a11 126. (Amended)

The method of claim 107, wherein said targeting moiety is selected from the group consisting of a protein, an antigen, a carbohydrate, a nucleic acid, a lipid, a coordination complex, a metal, a sugar, a vitamin, a dendrimer, and a crown ether.

a12 131. (Amended)

The antagonist of claim 107, wherein said enzyme is a protease and said targeting moiety is a receptor.

a13 146. (New)

The antagonist of claim 3, wherein said enzyme is a hydrolase, oxidase, reductase, or transferase.

~~147. (New)~~~~The antagonist of claim 146, wherein said enzyme is a hydrolase.~~Incl B16
148. (New)

The antagonist of claim 7, wherein said protease is a serine hydrolase.

149. (New)

The antagonist of claim 148, where said serine hydrolase is a subtilisin-type serine hydrolase.

150. (New)

The antagonist of claim 146, wherein said enzyme is an oxidase.

151. (New)

The antagonist of claim 146, wherein said enzyme is a reductase.

Ser. No. 09/556,466
Docket No. 23623-7048
Client Ref. GC 571-2

a13

152. (New) The antagonist of claim 146, wherein said enzyme is a transferase.

153. (New) The method of claim 39, where said enzyme is selected from the group consisting of a hydrolase, oxidase, reductase, or transferase.

154. (New) The method of claim 153, wherein said enzyme is a hydrolase.

155. (New) The method of claim 42, wherein said protease is a serine
hydrolase.

156. (New) The method of claim 153, wherein said enzyme is an oxidase.

157. (New) The method of claim 153, wherein said enzyme is a reductase.

158. (New) The method of claim 153, wherein said enzyme is a transferase.